

SOME SUMMER BIRDS OF NORTHERN NEW
BRUNSWICK.

BY P. B. PHILIPP AND B. S. BOWDISH.

Plates VII-IX.

DURING the past summer the authors made a second reconnaissance of the region in northern New Brunswick covered by the previous year's study of the breeding of the Tennessee Warbler, which was described in 'The Auk' for January, 1916. The period embraced by this study in 1915, was from June 18 to July 2; that in 1916 from June 2 to 27.

The nature of the country visited, having been described in the above mentioned paper, repetition of that description is unnecessary. An annotated list of the birds noted follows:

Gavia immer. LOON.—Frequently noted. Doubtless breeds.

Larus marinus. GREAT BLACK-BACKED GULL.—A number noted.

Larus argentatus. HERRING GULL.—Common and doubtless breeds.

Sterna hirundo. COMMON TERN.—Abundant. Breeds.

Phalacrocorax auritus auritus. DOUBLE-CRESTED CORMORANT.—A few noted.

Mergus serrator. RED-BREASTED MERGANSER.—Abundant. Breeds.

Anas rubripes. BLACK DUCK.—Common. Breeds.

Marila marila. SCAUP DUCK.—Breeds sparingly. A few seen throughout our stay, both years, and a parent with brood of small young noted, June 19, 1915.

Branta bernicla glaucogastra. BRANT.—Two flocks of at least sixty each noted June 3, 1916.

Botaurus lentiginosus. BITTERN.—A few scattering birds seen and heard during 1916 visit.

Ardea herodias herodias. GREAT BLUE HERON.—One noted July 1, 1915.

Gallinago delicata. WILSON'S SNIPE.—On June 15, 1916, we saw a pair of these birds whose actions gave all the indications of nesting. Under the same conditions, they were noted on several later occasions. The situation was boggy ground of excellent character for the breeding of these birds, but no nest was discovered.

Totanus melanoleucus. GREATER YELLOW-LEGS.—A few noted with Black-bellied Plover, June 4, 1916.

Actitis macularia. SPOTTED SANDPIPER.—Fairly abundant breeder.

Squatarola squatarola. BLACK-BELLIED PLOVER.—A flock of twelve

or fifteen noted on the day of our arrival, June 2, 1916, and for several days thereafter.

***Ægialitis meloda*.** PIPING PLOVER.— June 5 we found a small colony of breeding birds, five nests, each containing four eggs, being located. The nests were on sandy beach, some in the open, others among sparse clumps of beach grass. They were slight hollows in the sand, some quite unlined, others with a well formed rim of bits of broken shell or slate. The sitting birds usually flushed before they were seen, while the intruder was at a distance of a hundred feet, or more, and, sneaking quietly away, gave no clue to the whereabouts of the nest. If concealment offered, and one observer remained hidden, while the other walked away, the parent bird soon returned to the nest. In most instances incubation was well advanced.

***Bonasa umbellus togata*.** CANADIAN RUFFED GROUSE.— Common breeding bird. On June 16, 1916, a parent with brood of recently hatched young was observed, and others were noted with young on various occasions during both visits.

***Accipiter velox*.** SHARP-SHINNED HAWK.— One noted June 10, 1916.

***Haliaeetus leucocephalus leucocephalus*.** BALD EAGLE.— Common. Breeds.

***Pandion haliaetus carolinensis*.** OSPREY.— One seen June 12, 1916.

***Asio flammeus*.** SHORT-EARED OWL.— June 19, 1915, we found two nests of these birds, each containing five young, in varying stages of development, the largest being nearly a third grown, the smallest not appearing to be over a week old. In 1916 no birds were seen in the same locality.

***Ceryle alcyon alcyon*.** BELTED KINGFISHER.— Abundant breeding bird.

***Dryobates villosus leucomelas*.** NORTHERN HAIRY WOODPECKER.— A few noted in both visits. A nest with young observed early in June, 1914.

***Dryobates pubescens medianus*.** DOWNY WOODPECKER.— Apparently breeds sparingly. Nest with young noted June 14, 1916.

***Picoides arcticus*.** ARCTIC THREE-TOED WOODPECKER.— June 24, 1915, we found a nest of this species about ten feet up in a hard, bare, dead snag, in a partial clearing. It contained young still too small to appear at the entrance. June 10, 1916, another nest was located, some twenty feet from the ground, in a dead yellow birch, in partial clearing. This nest also contained young, which had left it by the 14th.

***Picoides americanus americanus*.** THREE-TOED WOODPECKER.— One seen June 21, 1916.

***Sphyrapicus varius varius*.** YELLOW-BELLIED SAPSUCKER.— Common breeding bird. June 7, 1916, one nest contained five fresh eggs, another five well incubated eggs, and of three other occupied nests, which were not investigated, one appeared to have young. On the 9th, another nest held five fresh eggs. Another nest, found on the 14th, evidently contained young as we could plainly hear them. The favorite situation was the dead heart of a live poplar, most often on the bank of a stream, and

facing same, but some nests were in totally dead trees, of different kinds. They ranged from eight to forty feet from ground.

Phlœotomus pileatus abieticola. NORTHERN PILEATED WOODPECKER.— One noted June 12, 1916.

Colaptes auratus luteus. FLICKER.— Fairly common. Breeds.

Antrostomus vociferus vociferus. WHIP-POOR-WILL.— Several heard.

Chordeiles virginianus virginianus. NIGHTHAWK.— Very common. Breeds. One found sitting on two nearly fresh eggs, June 21, 1916.

Chætura pelagica. CHIMNEY SWIFT. A few noted.

Tyrannus tyrannus. KINGBIRD. Several noted.

Nuttallornis borealis. OLIVE-SIDED FLYCATCHER. Frequently noted on both visits.

Empidonax flaviventris. YELLOW-BELLIED FLYCATCHER. Fairly common. A nest found with one egg on June 21, 1916, on the 24th, contained three eggs, on which the bird was sitting quite closely. It was built on the ground in the side of a large tussock of moss on which grew a scant covering of low sheep laurel bushes. The nesting site was an extensive, fairly open tamarack and spruce bog, and the tussock selected for the nest was a few yards from the edge of the thick spruce forest surrounding the bog. The nest was quite open and was a firmly built structure well cupped, composed of a thick foundation of dead fine grass with a few sphagnum moss fronds, well lined with fine dried grasses and some species of fine black rootlets. The three eggs were fresh and measured $.69 \times .52$, $.65 \times .52$, $.66 \times .52$. The nest measured, outside diameter 3 inches, inside diameter $1\frac{1}{2}$ inches; outside depth, 2 inches, inside depth $1\frac{1}{2}$ inches. The eggs are typical flycatcher eggs and cannot be mistaken for those of any of the small ground nesting warblers, and are of a white ground color, sparsely spotted, chiefly at the larger end, with fine reddish brown spots.

Cyanocitta cristata cristata. BLUE JAY. Apparently not common. Only one or two noted.

Perisoreus canadensis canadensis. CANADA JAY.— Common. On the occasion of our visits the birds were in family parties,— pairs of adults with families of usually three well grown, but dusky young.

Corvus brachyrhynchos brachyrhynchos. CROW.— Common. Breeds.

Euphagus carolinus. RUSTY BLACKBIRD.— A number of birds with well grown young seen on both visits.

Quiscalus quiscula æneus. BRONZED GRACKLE.— Abundant. Breeds. Large young observed June 2, 1916.

Pinicola enucleator leucura. PINE GROSBEAK.— Two noted June 12, 1916.

Carpodacus purpureus purpureus. PURPLE FINCH.— Common. Breeds.

Loxia leucoptera. WHITE-WINGED CROSSBILL.— Two June 3, 1916.

Astragalinus tristis tristis. GOLDFINCH.— A few noted.

Spinus pinus. PINE SISKIN.— Noted quite commonly in early June, 1916, in pairs. Doubtless breeds.

Poœcetes gramineus gramineus. VESPER SPARROW.— Common. Breeds.

Passerculus sandwichensis avanna. SAVANNAH SPARROW.— Common. Breeds.

Zonotrichia leucophrys leucophrys. WHITE-CROWNED SPARROW.— One noted.

Zonotrichia albicollis. WHITE-THROATED SPARROW.— Abundant breeding bird. Two of the nests found were in small spruces, one being forty inches from ground to bottom of nest, and both unusually bulky. One nest noted contained a lining of moose hair.

Spizella passerina passerina. CHIPPING SPARROW.— Common. Breeds.

Junco hyemalis hyemalis. SLATE-COLORED JUNCO.— Common. Breeds. Two nests with five eggs each noted.

Melospiza melodia melodia. SONG SPARROW.— Common. Breeds.

Melospiza lincolni lincolni. LINCOLN'S SPARROW.— Apparently not rare. A nest with five fresh eggs was found June 12, one with four small young and another with four well incubated eggs on June 21. These nests are well hidden in tussocks in marshy ground, and are hard to find as the bird sneaks off in a mouse like fashion and easily escapes notice. The nests and eggs largely resemble those of Song Sparrows, the nests noted differing in the absence of hair in the lining.

Melospiza georgiana. SWAMP SPARROW.— One noted June 10, 1916.

Piranga erythromelas. SCARLET TANAGER.— One noted June 6, 1916.

Petrochelidon lunifrons lunifrons. CLIFF SWALLOW.— Abundant breeding bird.

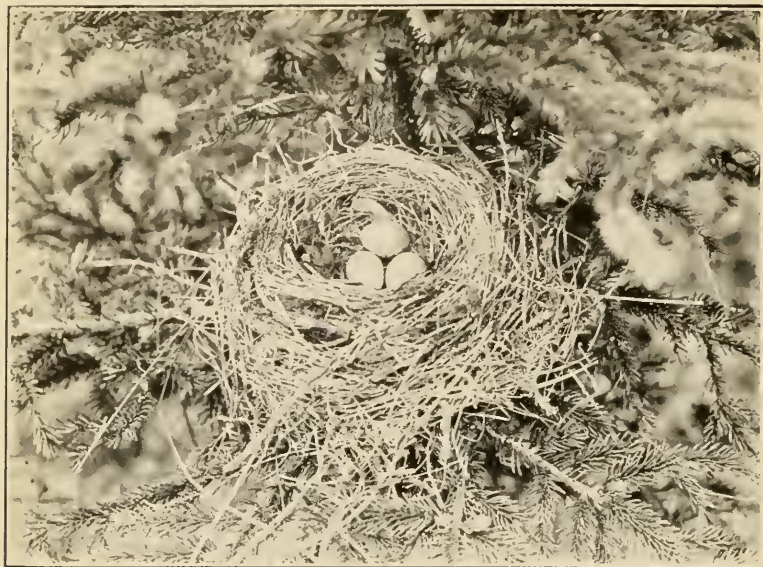
Hirundo erythrogastra. BARN SWALLOW.— Common. Breeds.

Iridoprocne bicolor. TREE SWALLOW.— Common. Breeds. A nest found June 12, 1916, contained six well incubated eggs.

Riparia riparia. BANK SWALLOW.— Common. Breeds. On June 19, 1916, the nests examined in a fair-sized colony contained mostly five fresh or nearly fresh eggs, each.

Bombycilla cedrorum. CEDAR WAXWING.— Noted commonly.

Vireosylva philadelphica. PHILADELPHIA VIREO.— Three nests with eggs of this species were found during our 1916 visit, and a number of pairs of birds were noted, where the nests were not located. The situations where nests were found, as well as where additional birds were observed, were, in every instance, on islands or along the shores of river bottoms, with a growth of willow and alder. The nests found were in slender forks of alder, at a height varying from ten to seventeen and one half feet (the latter actual measurement). On June 17, two of these nests held four eggs each, the third five, the only set of five vireo eggs of any species, of which we have knowledge. The nests are very beautiful structures, and quite different from those of the other Eastern Vireos. They are most compactly



1. NEST OF OLIVE-BACKED THRUSH.
2. NEST OF YELLOW PALM WARBLER.

built with thick outer walls of strips of birch bark, bits of rotten wood and the outer coverings of coarse weeds, well interlined with strands of a wiry moss (some species of usnea), this outer material giving the nests a tawny appearance, and even though, on June 6, 7 and 8, when the nests were first discovered, the alders were far from being in full foliage, they were very difficult to discern. Fine strands of some tree moss were used to bind the exterior material in position, the abundance of this material varying. Fine whitish shreds of grass and a little black hair formed the lining. One nest measured $2\frac{3}{4} \times 1\frac{1}{2}$ inches in depth, and $2\frac{7}{8} \times 1\frac{3}{4}$ inches in diameter. The eggs from this nest measured $.76 \times .53$, $.73 \times .55$, $.74 \times .55$, and $.75 \times .55$, in., and were white with dark brown spots and specks, the larger spots tending to have a rusty border, and resemble eggs of the Red-eyed Vireo, though smaller. The markings were rather sparse, fairly well distributed over the whole surface, though tending to greatest abundance about the larger ends. The eggs of the other set of four measured $.72 \times .54$; $.74 \times .55$; $.76 \times .56$; $.72 \times .54$ in. and the nest $2\frac{3}{4} \times 2$ inches outside diameter; $2\frac{1}{4} \times 1\frac{1}{4}$ inside diameter; $2\frac{1}{2}$ outside depth; $1\frac{3}{4}$ inside depth, in inches. The birds sit close, and when disturbed from the nest come close about the intruder, with none of the shyness that marked the behavior of Solitary Vireos whose nests we found. Mr. William Brewster described the song, in the Bulletin of the Nuttall Ornithological Club, Vol. V, 1881, p. 5, as being in general scarcely distinguishable from that of the Red-eyed Vireo, but mentioned that the present species "has, however, one note which seems to be peculiarly its own, a very abrupt, double-syllabled utterance with a rising inflection which comes in with the regular song at irregular but not infrequent intervals." In our experience with the birds, this distinctive song absolutely predominated with the general impression of a song quite distinctive from that of the Red-eye, or, in fact, of any other Vireo we had heard. These birds have the common scolding note characteristic of Vireos, but, in addition, they gave voice to several rather musical, but apparently protesting notes. In one instance, the female sung a subdued but musical reply to the song of her mate who was at a little distance from the nest on which she sat. Writers refer to color differences as furnishing the key to the identity of this species, but we found, in addition to this, that the difference in size is so apparent as to be very readily noticeable.

Lanivireo solitarius solitarius. BLUE-HEADED VIREO.—COMMON. Breeds. Two nests, each with four fresh eggs, were found on June 7 and 17, respectively. The former was about ten feet from the ground in a slender fork of a cedar tree, the exterior material being bound on with a considerable profusion of tree moss strands. The other was about six feet above the ground, in a spruce fork.

Mniotilta varia. BLACK AND WHITE WARBLER.—NOT COMMON. Several seen on both visits.

Vermivora rubricapilla rubricapilla. NASHVILLE WARBLER.—IN 1916 we found this species far more abundant than we did in the previous

year. Two nests, containing six and four eggs, respectively, were located, the situation and general appearance being much like those of the Tennessee Warbler nests. An unusually situated nest was found in 1915 on dry upland, in a grove of small pines.

Vermivora peregrina. TENNESSEE WARBLER.—To our experiences with this bird in 1915, as described in 'The Auk' for January, 1916, we would simply add that our 1916 experiences confirm the former ones. Fourteen nests were found, of which four contained seven eggs each, six contained six, three contained five eggs each, and one contained five newly hatched young, which were covered with black down. The earliest nest with five well incubated eggs was found on June 11. A nest was found June 12 containing five fresh eggs, a sixth being laid the following day. In the case of the latest nest, the sixth egg was laid on the morning of June 27 — the day of our departure. The nest of young was found on June 25. Our data for this second visit would seem to indicate that the breeding season is liable to vary considerably with different individuals.

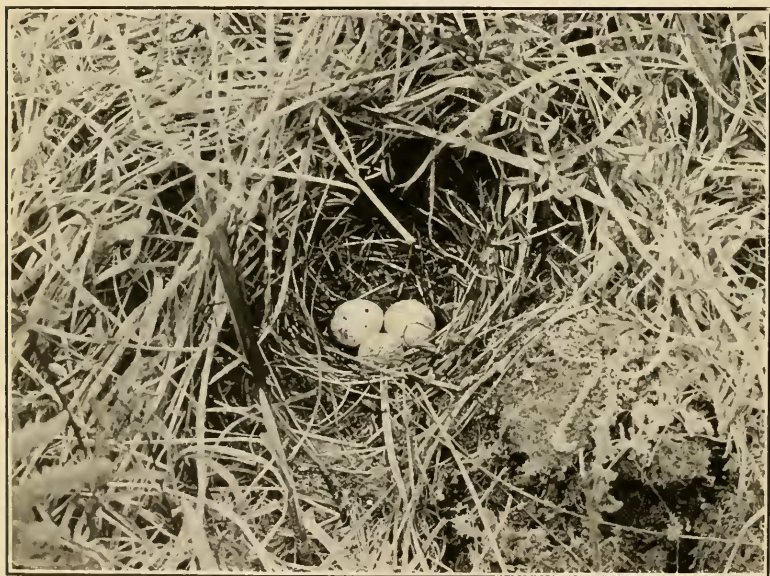
Compsothlypis americana usneæ. NORTHERN PARULA WARBLER.—One seen, June 15, 1916, a male, in song.

Dendroica caerulescens caerulescens. BLACK-THROATED BLUE WARBLER.—Fairly common. Breeds.

Dendroica coronata. MYRTLE WARBLER.—Common. Breeds.

Dendroica magnolia. MAGNOLIA WARBLER.—Abundant breeding bird.

Dendroica castanea. BAY-BREASTED WARBLER.—Common. Nearly every suitable bit of woods contained at least one pair of these birds. Six nests were found in 1915, as follows: one with seven fresh eggs, June 25; one with six fresh eggs, June 26; two with six eggs each, one fresh, the other about half incubated, June 27; one with seven half incubated eggs, June 29; and one with six eggs, incubation advanced, July 1. These nests were in small spruces, two of them being well out on horizontal limbs, the others close to the trunk, at heights varying from four to ten feet. None were very well concealed and some of them were remarkably open, but they blended so well with their surroundings that they were exceedingly difficult to discern. All of the nests of this species that we found resemble large structures of the Magnolia Warbler, being rather loosely constructed, of fine spruce or similar twigs, exteriorly, a little dead grass and some insect webs entering into the composition, and fine, black rootlets being commonly used as a lining. Although the birds were apparently as abundant as in 1916, only three nests were located, one with six fresh eggs June 14, eight feet up, one with six slightly incubated eggs, June 23, fifteen feet from ground, supported by two horizontal branches, against the main stem of a small balsam, near its top, in a clump of same, in partial clearing in spruce forest; the other with six slightly incubated eggs, twenty feet up against the trunk of a spruce tree at the edge of a clearing. This latter nest was in a very thick portion of the foliage and absolutely invisible from the ground, being found only by flushing the bird. A nest found June 27,



1. NEST OF BAY-BREASTED WARBLER.
2. NEST OF YELLOW-BELLIED FLYCATCHER.

1915, measured 2.50×1.25 inches in depth, and 3.50×2.12 inches in diameter. Another found June 23, 1916, measured 2.37×1.50 inches in depth and 4×2.12 inches in diameter. The eggs in the first of these two nests measured $.69 \times .52$, $.69 \times .52$, $.69 \times .51$, $.68 \times .52$, $.70 \times .54$, $.71 \times .54$. The ground color is a faint greenish-gray shade, heavily marked with spots and specks of reddish brown, with one or two slight washes of lighter tint and lavender shell blotches. The eggs in the other nest measured $.71 \times .56$, $.67 \times .55$, $.72 \times .55$, $.70 \times .54$, $.71 \times .55$, $.73 \times .55$. The ground color was rather more grayish than in the former set, thickly marked with lighter reddish brown, more in blotches, with lavender shell blotches. A set of seven measured $.73 \times .55$, $.73 \times .55$, $.70 \times .54$, $.73 \times .55$, $.73 \times .54$; and the nest outside diameter 4 inches with a depth of 2 inches; inside diameter 2.15, inside depth 1.15 inches. These eggs were very heavily blotched with reddish brown and lavender, chiefly at the larger end, with a ground color of a pale blue. Some of the nests found were substantial and well built structures, though exteriorly loose, others very frail, one on a horizontal limb being so thin of bottom as to endanger the eggs falling through.

The song is of a character quite similar to that of the Blackburnian Warbler, but slightly stronger and louder. It is delivered for long periods, with considerable frequency, and at all times of day, though less frequently toward the middle of the day. It appears that the female sings from the nest, in answer to the male, and the song is markedly weaker, being scarcely distinguishable from that of the Blackburnian Warbler. The approach of an intruder is apt to cause the female to become silent.

Dendroica striata. BLACK-POLL WARBLER.—Fairly common. Breeds.

Dendroica fusca. BLACKBURNIAN WARBLER.—A not very common breeding bird.

Dendroica virens. BLACK-THROATED GREEN WARBLER.—Fairly common breeder. A nest with four slightly incubated eggs was found on June 23, 1915, about five feet from ground in little balsam in thick growth of same, in a clearing in the woods, and another, near the same place, and also in a little balsam, the bottom of the nest being only twenty-seven inches from the ground, was found June 19, 1916, containing four fresh eggs.

Dendroica palmarum hypochrysea. YELLOW PALM WARBLER.—Fairly common breeding bird in suitable spots. While the majority of the birds and nests noted were in damp, boggy ground, as recorded by Knight in the Birds of Maine, one small breeding colony were nesting on high, dry ground, in a grove of small pines. Here, on June 24, 1915, a nest with four well incubated eggs was found, at the base of a tiny spruce and some shoots, quite unconcealed. Another with four newly hatched young was on a quite bare spot of ground, but concealed under a low hanging branch of a little spruce. On this occasion it appeared probable by the action of the birds, that most nests held young. On June 28 another nest with five eggs was found, incubation almost complete. It was well concealed in a grass tussock in a boggy little creek bed. In 1916, on June 9, a nest with